

## Poliomyelitis in the United States, 1954

The year 1954 marks the end of an era in poliomyelitis incidence in the United States. The era began in 1894 when Caverly investigated and reported upon an epidemic in Vermont. Although there are records of the existence of poliomyelitis in this country prior to 1894, this epidemic apparently was the first extensive one to be recognized. During the following 25 years the etiological agent of the disease was found and epidemiological characteristics accurately described. During this period severe epidemics occurred in various parts of the country, particularly in the decade from 1907 to 1916. Incidence remained relatively low from about 1920 to 1944, when more widespread epidemics began to occur.

---

*Dr. C. C. Dauer, medical adviser of the National Office of Vital Statistics, Public Health Service, prepared this report. His previous annual report on poliomyelitis appeared in the December 1954 issue of Public Health Reports, pp. 1185-1186.*

---

Although various measures, including vaccination, for control of poliomyelitis had been proposed or developed prior to 1954, none was effective. The success of the field trials in 1954 of the most recently developed vaccine may not have an immediate effect in reducing total incidence significantly, but it is a sign of a new era in preventing paralytic effects.

Incidence of poliomyelitis in the United States in 1954 was slightly below the average for the previous 5 years. The death rate remained relatively low, about 1.0 per 100,000 population.

	Number cases reported	Case rate per 100,000	Death rate per 100,000
1949-----	42,033	28.3	1.8
1950-----	33,300	22.1	1.3
1951-----	28,386	18.5	1.0
1952-----	57,879	37.2	2.0
1953-----	35,592	22.5	1.1
Average 1949-53---	39,438	25.7	1.4
1954-----	38,476	23.9	<sup>1</sup> 1.0

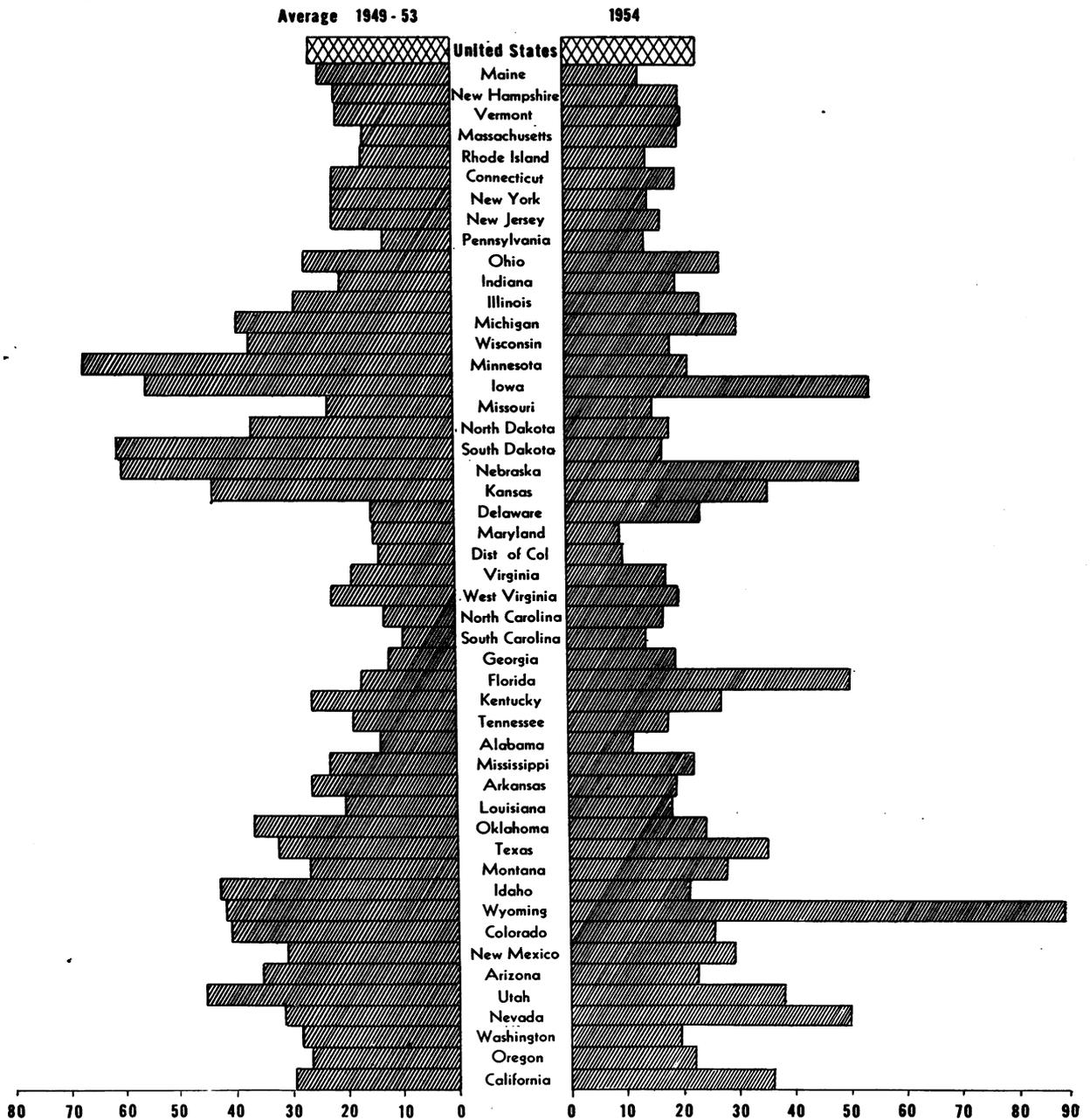
<sup>1</sup> Estimated.

The map shows the distribution of poliomyelitis by counties in 1954. Large areas of relatively high incidence, that is, rates in excess of 60 per 100,000 population, were located in Florida, Texas, Iowa, Kansas, Nebraska, Wyoming, Utah, and Nevada. Many smaller areas also experienced high attack rates. Incidence was high in both Iowa and Nebraska in 1952,

when western Iowa and eastern Nebraska were part of a larger epidemic area, but these sections had relatively low rates in 1954.

The chart shows the mean incidence or attack rates per 100,000 population for the 5-year period 1949-53 and for 1954. During the 5 years the attack rates were relatively high in the North Central, Mountain, and Pacific States.

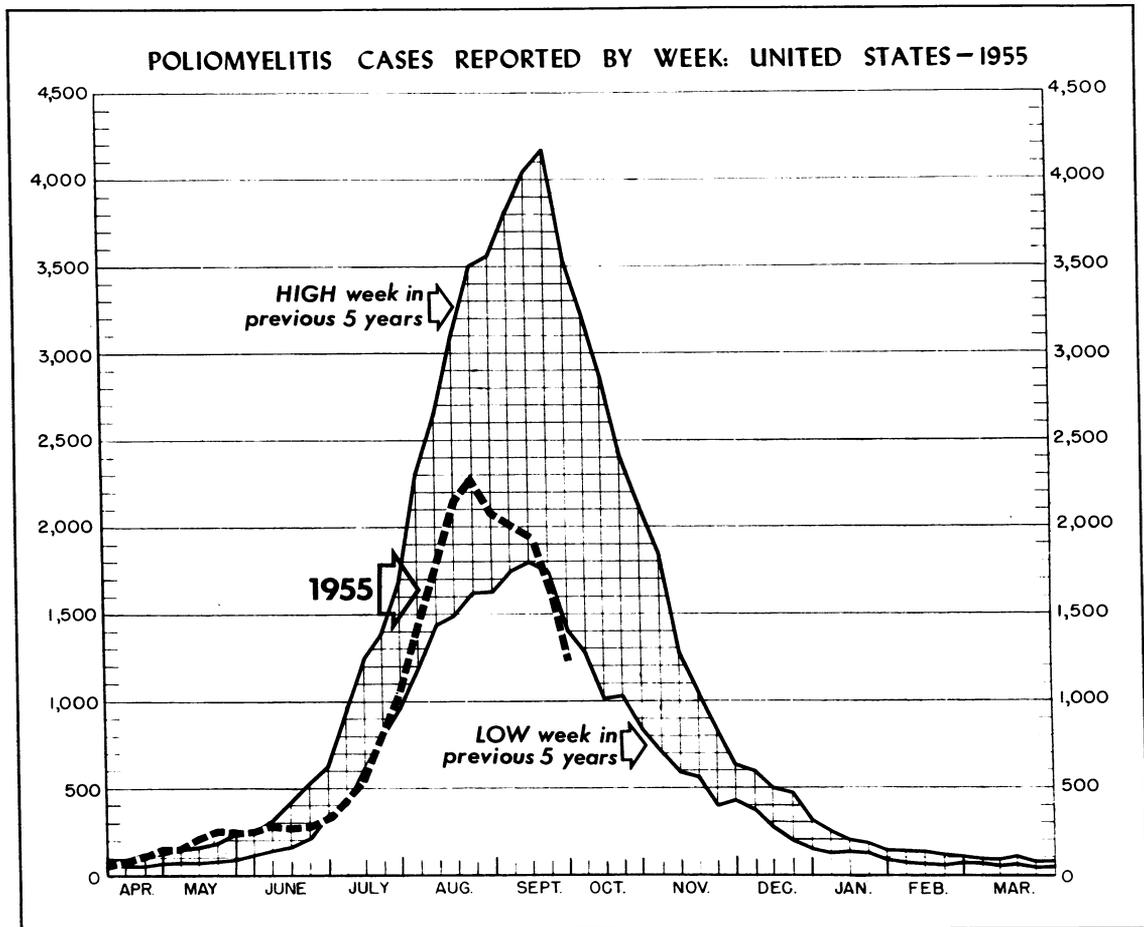
**Poliomyelitis morbidity rates per 100,000 population in the United States and by State.**



In 1954, 5 States had attack rates in excess of 50, and all but 1, Florida, were in the areas where incidence had been relatively high during the previous 5 years. Four other States had attack rates of 30 or more per 100,000 population. The exceptionally high incidence in Florida was due to the occurrence of a large number of cases late in the season, that is, in October. These cases were reported principally in a few counties in the northern part of Florida. A large proportion of cases occurred in adults. Paralysis of varying degrees was reported in 80 percent of the cases in this area. In other States with a high incidence, the occurrence of the disease followed the usual seasonal pattern characteristic of the respective areas.

Of the 38,476 cases reported in 1954, 48 percent were classed as paralytic, 34 percent as nonparalytic, and in 18 percent the type of disease was not specified. The corresponding figures for 1953 were 44, 34, and 22 percent, respectively. There has been a gradual change over the past 5 years with respect to the number reported in the unspecified group. This change indicates that greater efforts are being made to classify cases as either paralytic or nonparalytic. In 1954, 11 States classified all cases as paralytic and nonparalytic, and 5 reported less than 1 percent in the unspecified group. In 1954 only 1 State reported all cases as unspecified in contrast with 17 who made no differentiation of any cases in 1951.

★ ★ ★



# technical publications

---

## Health Manpower Source Book

### Dentists

*Public Health Service Publication No. 263, section 7, 1955. By Elliott H. Pennell and Maryland Y. Pennell. 159 pages; tables. \$1.25.*

This seventh section of the Health Manpower Source Book series presents data on the number, characteristics, and distribution of dentists in the United States. Mid-1952 distributions of non-Federal dentists are indicated for several county groupings and for the graduates of individual dental schools by year of graduation and current location of the dentists. The basic material represents enumerations from information supplied for individual dentists in the 1953 American Dental Directory published by the American Dental Association. In addition, United States census data are presented for dentists in the labor force to show trends from 1900 to 1950 and, for 1950, the characteristics of dentist in terms of age, race, sex, employment status, and income level.

## Occupational and Related Dermatoses

Abstracts from the literature, July 1943 to December 1953, inclusive.

*Public Health Service Publication No. 364. Public Health Bibliography Series No. B2. 1954. By Donald J. Birmingham and Paul C. Campbell. 183 pages. 65 cents.*

A continuation of Public Health Bulletin's Nos. 266 (1941) and 284 (1944), this publication carries forward abstracts of the literature on occupational and related skin diseases from July 1943 through December 1953. It is intended as a reference for dermatologists, industrial

physicians, and others interested in contact dermatoses.

Since practically every branch of industry, including agriculture, has exposures that may produce skin diseases, the volume of the pertinent literature necessitated limiting the articles chosen to representative papers in many subject areas. Wherever feasible the articles have been arranged according to the offending agent.

## Staffing the General Hospital, 25-100 Beds

*Public Health Service Publication No. 417. 1955. By Margaret K. Shafer. 32 pages; illustrated. 25 cents.*

These staffing guides, developed from 1-day data collected in 22 selected hospitals of less than 100 beds, help hospital and health authorities plan health facilities under the Hospital and Medical Facilities Survey and Construction Program.

Charts show number of persons by department for various sized hospitals; hours of nursing care per patient per day; and percent of nursing personnel assigned by shift of service and by size of hospital. Tables further clarify staffing problems.

## Sanitary Aspects of the Shellfish Industry of Japan

*Public Health Service Publication. Unnumbered. 1954. By L. R. Shelton, Jr., and Richard S. Green. 51 pages; illustrated.*

To provide background information for application of the legal responsibilities of the Food and Drug Administration on imports of frozen shellfish, and to advise the Japanese Government on sanitary practices, contributing to the protection of consumers, were the two

purposes of this survey, made at the request of the Japanese Government.

The information is particularly helpful to American importers and health officials. Of interest primarily to the Japanese are the recommendations on sanitary practices, most of which are already well-established in the United States.

## Spanish Edition of Standard Methods

A Spanish language edition of Standard Methods for the Examination of Water, Sewage, and Industrial Wastes, 1955, will soon be available. The translation was made by Chemical Engineer P. J. Caballero, chief of the water and sewage laboratory in the Ministry of Hydraulic Resources of Mexico.

Its publication on a nonprofit basis has been authorized by the American Public Health Association, the American Water Works Association, and the Federation of Sewage and Industrial Wastes Associations. The Health, Welfare, and Housing Field Party of the Institute of Inter-American Affairs in Mexico is sponsoring the publication of this book at \$6. Order accompanied by a draft or check for the exact amount of the order on a United States bank should be addressed to: Dr. Trois E. Johnson, chief, Health, Welfare, and Housing Field Party, Institute of Inter-American Affairs, American Embassy, Mexico, D. F., Mexico.

---

This section carries announcements of all new Public Health Service publications and of selected new publications on health topics prepared by other Federal Government agencies.

Publications for which prices are quoted are for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Orders should be accompanied by cash, check, or money order and should fully identify the publication. Public Health Service publications which do not carry price quotations, as well as single sample copies of those for which prices are shown, can be obtained without charge from the Public Inquiries Branch, Public Health Service, Washington 25, D. C.

The Public Health Service does not supply publications issued by other agencies.

---